LINE HOSE & COVERS



by Honeywell

LINE HOSE & COVERS

FAQ

- Q: What is SALCOR[®] Rubber and why does Salisbury use it to make their line hose products?
- A: SALCOR[®] Rubber is a TYPE II rubber that remains flexible in cold weather and is resistant to ozone and UV rays. Salisbury's exclusive SALCOR[®] Rubber is the preferred material for line hose and other insulating products because it easily withstands the elements and does not lose its flexibility or insulating properties.

HISTORY

Leading the industry with over ninety years of Research and Development

Filed: United States Patent Office, December 21, 1922 Serial No 605,340

"To all whom it may concern: Be it known that I, Moses B. Salisbury, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, has invented an Improved Protective Insulating Sleeve, of which the following is a specification. . ."

This application, one of hundreds filed in the US Patent Office for Salisbury, proved to be the most effective device for protecting linemen from accidental contact with energized lines, and is still regarded as indispensable to the electrical industry today.

With over ninety years of research and development on linemen's protective equipment, Salisbury offers the most comprehensive line of protection up to 69 kV in the industry.

NOTE

All Salisbury Covers and Protective Equipment are designed for personal protection only. They are not to be used for mechanical protection.

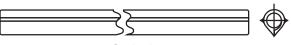
INSULATING LINE HOSE AND COVERS LINE HOSE SELECTION CHART



The connector, formed at one end, receives and overlaps the end of an adjoining hose for a distance of 6.5" (165 mm).

Use the chart below to determine the maximum conductor diameter recommended for use with each size line hose. For ease of installation and to minimize the potential of flashover through the overlapping lips, line hose is always sized larger than the maximum conductor diameter.

Salisbury Line Hose is available in four ASTM D1050 styles, as shown below:



Style A Class 2 & 3 Straight Conventional



Style B Class 2 & 3 Connector End Conventional



Style C Class 4 Extended Lip Straight



Style D Class 4 Extended Lip Connector End

LINE HOSE SI	ZE SELECTOR	CHART						
I.D. OF LINE HOSE IN. (MM)	CONDUCTORS AND DIAMETERS IN. (MM) 4/0 266,800 336,400 477,000 556,500 795,000 954,000 1,33 .46 (12) .609 (15.5) .677 (17) .793 (20) .858 (22) 1.028 (26) 1.126 (29) 1.3							
1 (25)	20 kV Conve	entional						
1 1/4 (31)	20 kV Conve	entional						
1 1/2 (38)	30 kV Conve	entional						
1 1/2 (38)	40 kV SU Sy	vstem						
2 (51)	30 kV Conve	entional						
2 (51)	40 kV SU Sy	vstem						
2 1/2 (64)	30 kV Conve	entional						
2 1/2 (64)	40 kV SU Sy	vstem						

LINE HOSE & CONNECTORS CONVENTIONAL SYSTEM

CONVENTIONAL STYLE LINE HOSE is available in orange Type II SALCOR®. SALCOR® remains flexible even in cold weather and it is not damaged by ozone or ultraviolet rays. Each line hose has Salisbury's RIB-GRIP® Locking System. The straight or connector end style is available in three sizes: 1" and 1.25" I.D. rated at 17 kV, Class 2 and 1.5" I.D. rated at 26.5 kV, Class 3.

STRAIGHT STYLE SALCOR® HOSE is also available in 2" or 2.5" I.D. rated at Class 3.

CONVENTIONAL LINE HOSE CONNECTORS are

made from Type II orange SALCOR® and can be used on 1", 1.25", or 1.5" I.D. conventional line hose. To connect 2" and 2.5" I.D. conventional line hose, use the SU System Connector.

THE TIGHTEST GRIP IN THE INDUSTRY.

The self-locking lip, that Salisbury patented, prevents line hose from coming off the conductor after an installation is complete. Often, as a lineman is working on an installation and making adjustments, the angle of connection shifts, causing line hose and covers to separate. To prevent this, Salisbury developed an ingenious solution for ensuring that any two protective devices would hold together yet still be easy for a lineman to assemble and take apart.

RIB-GRIP® construction takes advantage of rubber's natural tendency to grip and tighten its grip through compression. By creating curving rib configurations slit at a specific angle, two pieces easily slip together but resist coming apart. To quickly disengage the lineman needs only to compress the rubber on either side.



RIB-GRIP® Locking System



Sectional view of typical insulator cover showing arrangement of ribs. Ribs are engineered to grip the serrations on its corresponding line hose, regardless of angle.



A row of serrations on both sides of connector line hose grips snugly inside the large arm of insulator covers.



Saw-tooth serrations on the ends of line hose are angled to make it easy to insert, but resist coming apart.



Connector end line hose with rubber ribs grasp tightly and

OR125-45C

LINE HOSE & CONNECTORS CONVENTIONAL SYSTEM

CAT. NO.	ASTM CLASS	TYPE	DIMENSIONS I.D. X LENGTH in. (mm)	WEIGHT EA Ibs. (kgs)
SALCOR® STRAIGHT LI	NE HOSE			
OR100-3	2		1" x 3' (25 x 915)	3 (1.4)
OR100-45	2		1" x 4.5' (25 x 1372)	4 (1.8)
OR100-6	2		1" x 6' (25 x 1820)	5.5 (2.5)
OR125-3	2		1.25" x 3' (31.5 x 915)	4 (1.8)
OR125-45	2		1.25" x 4.5' (31.5 x 1372)	6 (2.7)
OR125-6	2		1.25" x 6' (31.5 x 1820)	7.5 (3.4)
OR150-3	3		1.5" x 3' (40 x 915)	5 (2.3)
OR150-45	3		1.5" x 4.5' (40 x 1372)	7 (3.2)
OR150-6	3		1.5" x 6' (40 x 1820)	9.5 (4.3)
OR200-3	3		2" x 3' (50 x 915)	5.5 (2.5)
OR200-45	3		2" x 4.5' (50 x 1372)	8 (3.6)
OR200-6	3		2" x 6' (50 x 1820)	11 (5.0)
OR250-3	3		2.5" x 3' (63 x 915)	7 (3.2)
OR250-45	3		2.5" x 4.5' (63 x 1372)	10.5 (4.8)
OR250-6	3	II	2.5" x 6' (63 x 1820)	14 (6.4)
SALCOR [®] CONNECTOR	END LINE HOSE			
OR100-3C	2		1" x 3' (25 x 915)	3.5 (1.6)
OR100-45C	2	11	1" x 4.5' (25 x 1372)	5 (2.3)

OR100-3C	2	Ш	1" x 3' (25 x 915)	3.5 (1.6)
OR100-45C	2	II	1" x 4.5' (25 x 1372)	5 (2.3)
OR100-6C	2	II	1" x 6' (25 x 1820)	6.5 (2.9)
OR125-3C	2	II	1.25" x 3' (31.5 x 915)	4.5 (2.0)
OR125-45C	2	II	1.25" x 4.5' (31.5 x 1372)	6.5 (2.9)
OR125-6C	2	II	1.25" x 6' (31.5 x 1820)	7 (3.2)
OR150-3C	3	II	1.5" x 3' (40 x 915)	6 (2.7)
OR150-45C	3	II	1.5" x 4.5' (40 x 1372)	8 (3.6)
OR150-6C	3	ll	1.5" x 6' (40 x 1820)	9 (4.1)

LINE HOSE CONNECTORS

0RC100	2		1" x 1' (25.4 x 305)	2.5 (1.1)
ORC125	2		1.25" x 1' (32 x 305)	3.5 (1.6)
ORC150	3	I	1.5" x 11' (38 x 305)	3 (1.4)

ALL LINE HOSE COMPLIES WITH CURRENT ASTM D1050 SPECIFICATIONS.



PROTECTORS & COVERS CONVENTIONAL SYSTEM

Insulator Covers, in orange, weather resistant Type II **SALCOR**[®], are used with conventional line hose to cover pin-type insulators. All covers feature **RIB-GRIP**[®] construction to lock to the underside of the insulators. The large diameter arm overlaps the small arm of the adjoining cover on double arm constructions which provides complete insulation at the joint regardless of the varying distance between pins.

Dead End Protectors cover 4.25" and 6" bells or polymer insulators with a skirt diameter of less than 6". The protectors are made from orange Type II **SALCOR®** with **RIB-GRIP®** construction. **OR101** has outer ribs that allow it to be used with 2" and 2.5" I.D. Conventional Line Hose when using the UC2 connector. The smaller **OR114** may also be used to cover transformer bushings up to 4.75" in diameter. **OR124** can cover polymer insulators up to 4.75" in diameter and 25" overall length including hardware. Replacement Straps are available.

To work on live lines safely, conductors encased in a line hose should never be placed directly on a cross arm. **CROSS ARM COVERS** reduce electrical stresses on line hose or jumpers. Cross Arm Covers fit standard cross arm pin spacing and each unit has interior ribs to minimize shifting on the arm.

Flexible **CUTOUT COVERS** can be used for overhead cutouts as well as for underground pad-mount applications. Cutout Covers comply with the current ASTM D1049 (ASTM Specifications for Rubber Insulating Covers) specifications.





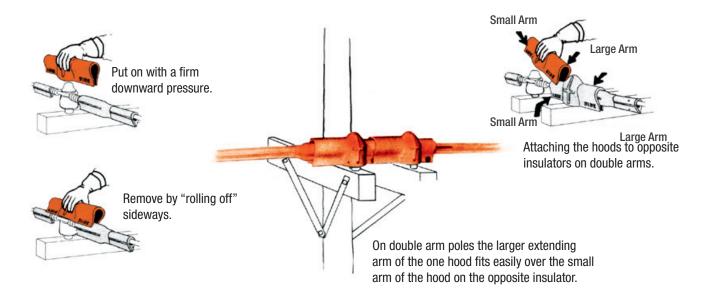
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PROTECTORS & COVERS CONVENTIONAL SYSTEM

CAT. NO.	CLASS	DESCRIPTION in (mm)		OVERALL DIMENSIONS in (mm)	WEIGHT EA Ibs. (kgs)
		FOR USE V	VITH		
NSULATOR (COVERS	INSULATOR CLASS	LINE HOSE SIZE		
OFRG	2	55-1/2/3	1" (25.4)	14.5" x 5" (368 x 127)	5 (2.3)
OJRG	2	55-4	1" (25.4)	16" x 6.5" (406 x 165)	6 (2.7)
OKRG	3	55-5	1.25", 1.5" (32 , 38)	16" x 8" (406 x 203)	7 (3.2)
		FOR USE V	VITH		
DEAD END P	ROTECTORS	BELL SIZE	LINE HOSE SIZE		
OR101	2	2-6"(152.4)	1" (25.4)	6.5" x 23" (165 x 584)	10 (4.6)
OR114	3	1-4.25" (108)	1.5" (38)	4.75" x 14" (121 x 356)	4 (1.8)
OR124	3	2-4.25" (108)	15" (38)	4.75" x 29" (121 x 737)	7.5 (3.4)
CROSS ARM	COVERS	USE ON CROS	S ARMS UP TO		
145	2	4" x 4.5" (1	02 x 114)	14.5" x 4.63" x 4.15" (368 x 117 x 105)	3 (1.4)
1186	4	5.5" x 6" (1	40 x 152)	17.0" x 6.0" x 5.5" (432 x 152 x 140)	5 (2.3)
CUTOUT COV	'ERS				
CC24	2	-		24" x 15" x 3.5" (600 x 376 x 88)	5 (2.3)
CC30	4	-		30" x 20" x 7" (750 x 500 x 175)	10 (4.5)

N24	For 114 & 124 Series	.75 x 30 (18 x 588)	2 oz. (56.7 g)
N36	For 101 Series	.75 x 36 (18 x 882)	2 oz. (56.7 g)

ALL COVERS COMPLY WITH CURRENT ASTM D1049 SPECIFICATIONS.



LINE HOSE EXTENDED LIP SU SYSTEM

The **EXTENDED LIP SU SYSTEM** is the only complete flexible cover-up available for use on voltages through 34.5 kV. Extremely versatile, it may be installed by hand, wearing rubber insulating gloves, from an insulated aerial device or platform, or with hot sticks using the SU applicators.

Manufactured from superior SALCOR® Type II elastomer, it is resistant to the effects of ozone and ultraviolet deterioration. It remains flexible even at sub-zero temperatures.

Salisbury's RIB-GRIP® construction securely interlocks with its corresponding covers and connectors. Tapered lips facilitate easy starting on the conductors. The contour cut ends accommodate the skirts of pin type insulators and permit the hose to cover the line snug to a saddle or clamp.

Available as STRAIGHT LINE HOSE or with a Connector End for easier connection of line hose and covers. A lifting eye is molded on the connector end for removal with hot sticks. Line hose is also available with the #2323 Shot Gun Eye Assembly. Just add a suffix of "E" to the catalog number to order the #2323 Shot Gun Assembly installed on the hose or order the #2323 separately.

NEW SU 150 SERIES MOLDED DESIGN the new molded design makes for a consistent overall profile, offers greater electrical insulation between the connector and line hose and since the serrations are also molded an improved locking system.

SU SYSTEM CONNECTORS are made from orange SALCOR® Type II. RIB-GRIP construction is used to ensure a strong lock to the straight lengths of SU System Line Hose and covers. The UC2 is used to connect Extended Lip Hose to PTHL and LRG Insulator Covers, OR134 Dead End Protectors, and 2" (51 mm) and 2.5" (64 mm) SU System and Conventional Line Hose.

CAT. NO.	DIMENSIONS I.D.	S FT. (MM) Length	WEIGHT EA. Ibs. (kgs)
STRAIGHT LIN	E HOSE CLASS 4	, TYPE II	
*SU150-3	1.5" (38)	3' (915)	6 (2.7)
*SU150-45	1.5" (38)	4.5' (1372)	8.5 (3.8)
*SU150-6	1.5" (38)	6' (1829)	12 (5.4)
SU200-3	2" (51)	3' (915)	6 (2.7)
SU200-45	2" (51)	4.5' (1372)	10 (4.5)
SU200-6	2" (51)	6' (1829)	14 (6.4)
SU250-3	2.5" (63.5)	3' (915)	7 (3.2)
SU250-45	2.5" (63.5)	4.5' (1372)	11 (5.0)
SU250-6	2.5" (63.5)	6' (1829)	15 (6.8)

CONNECTOR END LINE HOSE CLASS 4, TYPE II

*SU150-3C	1.5" (38)	3' (915)	7 (3.2)
*SU150-45C	1.5" (38)	4.5' (1372)	9 (4.1)
*SU150-6C	1.5" (38)	6' (1829)	12 (5.4)

SU SYSTEM CONNECTORS CLASS 4, TYPE II ASTM D1049

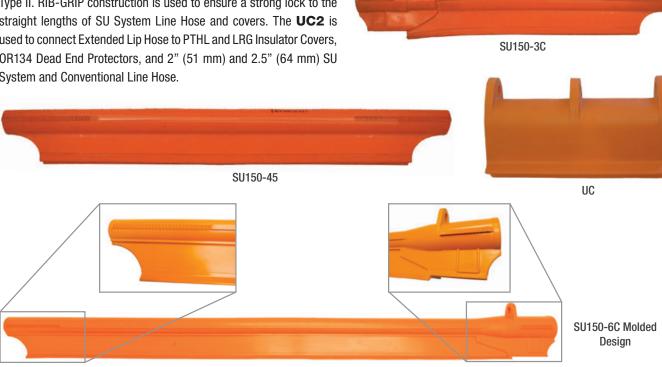
	Length x Height	Use w/ Line Hose I.D.	
UC	10.5" x 6" (263 x 150)	1.5" (40)	2 (.9)
UC2	10.5" x 7.75" (263 x 194)	2"&2.5" (51&64)	3 (1.4)

Add Suffix "E" to Catalog Number to order with #2323 Shot Gun Eye Assembly (see page B-12).

Example: SU200-45E is a 2" ID x 4.5' Line Hose with a shot gun assembly attached

* MOLDED ONCE PIECE DESIGN

COMPLIES WITH CURRENT ASTM D1050 SPECIFICATIONS.



DEAD END PROTECTORS EXTENDED LIP SU SYSTEM

0R134





Easily installed and removed from an insulated platform or aerial device with rubber gloves or SU System Applicators.

All styles have RIB-GRIP[®] construction to interlock with 1.5" (38 mm) I.D. line hose. The Class 3 U106 and U110 must be used with Connector End style line hose or separate Line Hose Connectors. OR134, Class 4, accepts Straight Line Hose. The outer ribs interlock with 2" and 2.5" I.D. line hose when the UC2 SU System Connector is used.



Black

10 (4.5)



U110

CAT. NO.	ASTM Class / Type	FITS BELL SIZE in. (mm)	DIMENS I.D. Body	IONS IN. (MM) Overall Length	COLOR	WEIGHT EA. Ibs. (kgs)
DEAD END P	ROTECTORS					
0R134	4 / II	3-4.25 (108)	4.76 (121)	37 (940)	Orange	13 (6)
Add Suffix "E"	' to Catalog Number to orde	er with #2323 Shot Gun Ey	e Assembly (see	page B-12).		
U106	3 / 11	2-6 (152)	7 (178)	28.5 (724)	Black	9 (4.1)

10.5 (267)

28.5 (724)

Add Suffix "E" to Catalog Number to order with #2340 Shot Gun Eye Assembly (see page B-12).

2-10 (254)

ALL PROTECTORS COMPLY WITH CURRENT ASTM D1049 SPECIFICATIONS.

3 / II

U110

INSULATOR COVERS EXTENDED LIP SU SYSTEM

The **UH PIN-TYPE COVER** covers insulators up to ANSI standard C29.5 Class 5. The sides are cut to be used on small insulators without resting on the crossarm. When covering a 7" diameter insulator on a double arm construction, the ends of the cover will meet flush on 10.5" pin centers.

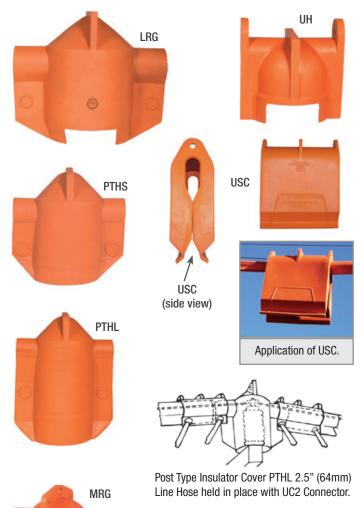
The **LRG SU SYSTEM PIN-TYPE COVER** fits insulators 10.5" (267 mm) in diameter and is used with 2.5" (64 mm) Class 4 Extended Lip SU System Line Hose. Always use clamp pins to secure the device into position. Pinning rings have been placed on the cover's arms to prevent separation.

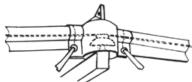
POST-TYPE INSULATOR COVERS interlock with 1.5" (38 mm) Class 4 Extended Lip SU System or Conventional Line Hose. The **PTHS** for insulators up to 12" (305 mm) and the **PTHL** for insulators up to 16" (406 mm) in height. The **PTHL** cover also has external ribs on the ears which secures 2.5" (64 mm) I.D. line hose. Always use clamp pins to secure the device into position.

The Class 4 **MRG UNIVERSAL COVER** covers pin-type insulators through 8.5" (216 mm) diameter and 13.8 kV post-type insulators. A trim bead permits use on both 35 kV and 15 kV crossarm construction.

The **USC STIRRUP COVER** is a lightweight cover that can be installed using rubber gloves or a hot stick. The USC also feature RIB-GRIP[®] construction and is meant to be used with Extended Lip SU Systems or Conventional Line Hose.

All covers are made from orange SALCOR[®] and feature RIB-GRIP[®] Construction. They can be installed with a hot stick or rubber gloves. All covers comply with ASTM D1049 specifications.





Pin Type Insulator Cover - LRG or MRG Line Hose is inserted in the ears of the cover.

CAT. NO	ASTM Class / Type	FITS LINE HOSE in (mm)	FITS INSUL. Max Dia in. (mm)	FOR USE W/ INSUL. CLASS	OVERALL DIM	ENSIONS (mm) Height -in.	WEIGHT EA Ibs. (kgs)
	INSULATOR CO		max bla in: (inii)		1.5. 5003	noight in	150. (190)
LRG	4/11	2.5 (63)	10.5 (263)	55-6	12 (305)	16 (400)	8 (3.6)
MRG	4 / II	1.5-2.5 (40-63)	8.5 (213)	Pin Type 55-5 Post Type 13.2 kV F Neck Post Type 13.2 kV C Neck	9 (221	12.25 (306)	7 (3.2)
Add Suff	ix "E" to Catalog	Number to order wi	th #2359 Shot Gun Eye	Assembly (see page A-13).			
UH	3 / II	1.5 (40)	7 (175)	55-1, 2, 3, 4, 5	7.5 (184)	12 (300)	6 (4.4)
POST TY	PE INSULATOR (COVERS					
PTHL	4 / II	1.5-2.5 (40-63)	6.5 (163)	57-2	7 (172)	16 (400)	8 (3.6)
PTHS	4 / II	1.5 (40)	7 (175)	57-2	7.5 (184)	12 (300)	4 (1.8)
STIRRUP	COVER						
USC	4 / 11	1.5 (40)	-	-	14 (263)	15.5 (388)	5 (2.3)

CABLE END CAPS & ARRESTER COVERS



Cable End Caps are applied with rubber gloves. They are used on high voltage distribution cable ends found in vaults, cubicles and substations when cable remains energized during work. Cable End Caps are made from Type II orange SALCOR[®].

NEW LOOPED CABLE END CAP The Looped Cable End Cap is an improved version of our Self-Securing Cable End Cap in that it allows for versatile applications. The product can be applied with appropriate Rubber Insulating Gloves as with our standard cable end caps, but the looped end feature also enables the product to be applied using a hotstick.

SELF-SECURING CABLE END CAPS for Underground Distribution are rated at 20 kV, and have a minimum wall thickness of .25". They keep moisture and contamination off trimmed cable ends. The self-securing slot keeps the cable locked safely inside the end cap. These Cable End Caps are applied with rubber gloves.

LIGHTNING ARRESTER COVERS are made from Type II orange SALCOR[®]. The slot allows the cap to fit directly over the energized lightning arrestor and the line connection. Lightning Arrester Covers can be applied with rubber gloves or a hotstick.

CLEAR CABLE COVERS are made from clear PVC round or oval tube. Each cover has a grip all handle attachment for installation with an insulated grip all hotstick.

CLEAR PVC STRESS CONE COVER has a grip all attachment that allows this cover to be installed with an insulated grip all hotstick. The inspection window can be opened for testing with a voltage sensor.

CAT. NO.	ASTM Class	TYPE	DIMENSIONS in. (mm) I.D. x Length	FOR USE W/ CABLE SIZE	WEIGHT EA. Ibs. (kgs)
SELF-SECU	JRING CAB	LE END C	APS		
29003	2		3.19 (81) X 9.13 (486)	-	2.27 (1.0)
117	2		1.38" x 10" (35 x 254)	#4/0 to 500 MCM	.50 (.23)
173	2		.81" x 6" (21 x 152)	#4 to #4/0 AWG	.25 (.1)
177	2	II	2.25" x 12" (57 x 305)	350 to 750 MCM	.75 (.35)
178	2	II	3.19" x 16" (81 x 406)	800 to 1000 MCM	1.5 (.7)
LIGHTNING	ARRESTE	R COVERS			
536A	4		4.5 x 15 (113 x 375)	-	3 (1.4)
636A	4	II	5.5 x 22 (138 x 550)	-	5 (2.3)

THESE COVERS COMPLY WITH CURRENT ASTM D1049 SPECIFICATIONS.

CAT. NO.	DESCRIPTION	ASTM F712 Class / Rating kV	DIMENSIONS Length in. / I.D. in. / O.D. in.	WEIGHT lbs. (kgs)	
CLEAR CABLE COVERS					
14200032P	2" A PVC Cable Cover	2 / 14.6	20 / 2 / 2.38	1.5 (0.68)	
14200033P	3" 🔺 PVC Cable Cover	2 / 14.6	20 / 3 / 3.38	3.2 (1.45)	
14200034P	4" A PVC Cable Cover	2 / 14.6	20 / 4 / 4.38	4.3 (1.95)	
14200036P	6" 🔺 PVC Cable Cover	2 / 14.6	20/6/6.5	5.3 (2.41)	
CLEAR PVC STRESS CONE COVER					
14200011	-	2 / 14.6	13 / 3 / 3.5	3 (1.36)	

SU SYSTEM APPLICATORS

THE EXTENDED LIP SU SYSTEM may be installed by using rubber gloves or hot sticks on distribution voltages up to 34.5kV.

The Shot Gun Eye Assembly for the SU System equipment may be purchased separately for installation on the appropriate cover-up device.

The addition of these eye assemblies enable all SU System equipment to be easily handled with a standard shotgun stick. 2359 Shotgun Assembly attaches easily to SU Systems

CAT. NO.	DESCRIPTION	FOR USE W/ HOT STICK STYLE	WEIGHT EA. Ibs. (kgs)
2323	Shot Gun Eye Assembly for SU Hose / OR134	Shot Gun	1 (.4)
2359	Eye Assembly for SU System Insulator Covers	Shot Gun	.5 (.2)



2323 Shot Gun Assembly FOR LINE HOSE ON PAGE B-8

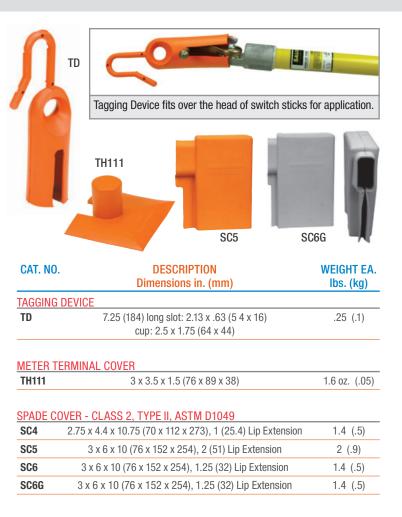


SPECIAL EQUIPMENT

THE TD TAGGING DEVICE, made from molded orange SALCOR[®], is used to tag opened disconnect switches. It allows "Hold" cards to be placed on the circuit and fits over the heads of 1-1/4" (32 mm) and 1-1/2" (38 mm) switch sticks.

THE TH111 METER TERMINAL COVER is used to avoid accidental contact with energized parts on 100 and 200 Amp single phase meter sockets. Made of orange SALCOR[®].

SPADE COVERS are easily installed to provide temporary insulation when working in padmount transformers and other electrical apparatus. If spade covers are securely held in place, they may be left on spades or connectors indefinitely for front end protection. The larger SC5, SC6, or SC6G are also used to cover primary elbows as well as the larger and longer multiple lead primary and secondary fittings and lugs used in underground enclosures and vaults. Molded from flexible SALCOR[®], they have excellent aging and weathering characteristics. The opening at the top end of the slot holds the cover onto the terminal. Wide lips extending along the slot provide additional protection over the connection.



B-12 SALISBURY by Honeywell 101 E. Crossroads Pkwy., Ste. A Bolingbrook, IL 60440 • U.S.A. Toll-Free:877.406.4501 • U.S.A. Toll-Free Fax:866.824.4922